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PD - 2000-11-14

PR - JP19990123441 19990430

OPD - 1999-04-30

TI - SYSTEM FOR MONITORING ELECTRIC POWER

IN - MATSUSHIMA TOSHIO;YAMAMOTO KAZUYUKI;KOHAMA TAKETAKA; NAKADA TAKESHI;TAKAHASHI KAZUHISA

PA - MATSUSHITA ELECTRIC WORKS LTD;NIPPON TELEGRAPH & TELEPHONE

IC - G01R22/00

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TI - Electric power monitoring system for electric equipment installed in residence, performs real time display of each of instantaneous values and total values of DC electric power and consumed AC power

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PA - (MATW) MATSUSHITA ELECTRIC WORKS LTD

- (NITE) NIPPON TELEGRAPH & TELEPHONE CORP

IC - G01R22/00

AB - JP2000314752 NOVELTY - Distribution board (60) determines the instantaneous value of DC electric power generated by solar power generation module, total value of DC power, instantaneous value and total value of AC power consumption. An electric power monitoring apparatus (80) performs real time display of each of the determined instantaneous values and total values.

- DETAILED DESCRIPTION - The distribution board (60) sends AC electric power signal detected by AC power consumption detection unit (61) to an input conversion IFU (62) that receives DC electric power signal detected by DC power detection unit (30). The input conversion IFU sends the integrating value of AC and DC signal to the electric power monitoring apparatus (80) for display. A control apparatus (64) produces data signal for transmission of integrating value, and a modem (63) performs fixed time sending out of data produced in control apparatus through communication circuit (90).

- USE - For monitoring DC energy generated by solar power generation apparatus installed in residence, etc., and the amount of AC power consumed by electric equipment in residence, industry.

- ADVANTAGE - Since the instantaneous values and total values of

DC and AC power are displayed in electric power monitoring apparatus, indirect load control is simplified based on consciousness of consumer. Thus energy conservation can be achieved.

- DESCRIPTION OF DRAWING(S) - The figure shows block diagram of electric power monitoring system.
- DC power detection unit 30
- Distribution board 60
- AC power consumption detection unit 61
- IFU 62
- Modem 63
- Control apparatus 64
- Electric power monitoring apparatus 80
- Communication circuit 90
- (Dwg.1/5)

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TI - SYSTEM FOR MONITORING ELECTRIC POWER

AB - PROBLEM TO BE SOLVED: To visually monitor instantaneous value and integrated value of domestically generated direct current power and alternating current power consumption in real time.

- SOLUTION: A distributution board 60 for a dwelling house mounted with an electric power monitoring function for providing an instantaneous value and an integrated value of direct current power generated by a solar battery module 10 and an instantaneous value and an integrated value of alternating current power consumption supplied from a commercial alternating current power line, and an electric power monitoring device 80 for displaying the instantaneous values and the integrated values in a real time are provided in this power monitoring system. The instantaneous values and the integrated values of the generated direct current power and the alternating current power consumption are visually grasped in a real time by the monitoring device 80 according to this manner,

the own domestic integrated values are compared developpedly with another domestic or general domestic ones, and indirect load control is easily realized based on self-consciousness of a consumer to thereby promote energy saving.

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